

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

ZANDER

Atty. Ref.: 35-204

Serial No. Unknown

Group:

Filed: April 18, 2001

Examiner:

For: USE OF CD34 OR A POLYPEPTIDE DERIVED THEREFROM AS CELL-SURFACE  
OR GENE-TRANSFER MARKER

\* \* \* \* \*

April 18, 2001

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

Preliminarily amend the above-identified application as follows:

**IN THE SPECIFICATION:**

Amend the specification as follows:

Insert the attached Sequence Listing in place of the Sequence Listing of the originally-filed application.

**IN THE CLAIMS**

Amend the claims as follows:

Cancel claims 24, 25 and 30, without prejudice.

3. (Amended) Vector according to Claim 1, characterized in that the nucleic acid sequence codes for the surface marker is the sequence indicated in SEQ ID NO: 1, 3 or 5 or for a fragment, a mutant or variant of the same.

4. (Amended) Vector according to Claim 1, characterized in that it is a retroviral vector.

5. (Amended) Vector according to Claim 1, characterized in that it contains a nucleic acid sequence coding for a further surface marker.

9. (Amended) Host cell, characterized in that it is transduced with a vector according to Claim 1.

12. (Amended) Method for the detection of genetically modified cells, characterized in that the cells are transduced with a vector according to Claim 1 and the transduced cells are identified by detection of the surface marker.

13. (Amended) Method for the selection of genetically modified cells, characterized in that the cells are transduced with a vector according to Claim 1, bound to an agent specific to the surface marker, and separated from the genetically unmodified cells.

16. (Amended) Method according to Claim 14, characterized in that the nucleic acid sequence codes for a surface marker according to SEQ ID NO: 2, 4 or 6 or for a fragment or a variant of the same.

17. (Amended) Method according to Claims 14, characterized in that the nucleic acid sequence coding for the surface marker is the sequence indicated in SEQ ID NO: 1, 3 or 5 or a fragment, mutant or variant of the same.

18. (Amended) Method according to Claim 14, characterized in that the vector is a retroviral vector.

19. (Amended) Method according to Claim 14, characterized in that the vector corresponding to DSM 13396 is used.

20. (Amended) Method according to Claim 12, characterized in that the cells are human cells.

22. (Amended) Kit containing a vector according to Claim 1 and means for the specific detection of a surface marker, and further agents and aids required for carrying out a detection.

23. (Amended) Kit containing a vector of Claim 14 and, means for the specific detection of a surface marker and further agents and aids required for carrying out a detection.

26. (Amended) Use of a vector according to Claim 1 for *in vitro* transduction of T-lymphocytes.

27. (Amended) Use of a vector according to Claim 1 for gene therapeutic treatment.

28. (Amended) Use of T-lymphocytes which are transduced with a vector according to Claim 1, for gene therapeutic treatment.

31. (Amended) Gene therapeutic drug, containing a vector according to Claim 1.

32. (Amended) Gene therapeutic drug, containing T-lymphocytes, which are transduced with a vector according to Claim 1.

### **REMARKS**

An inventor's Declaration is attached.

The above amendments of the claims have been made to reduce multiple dependencies and claims filing fees. The amendments have been made without prejudice.

The specification has been amended to include the attached Sequence Listing. The attached paper and computer readable copies of the Sequence Listing are the same. No new matter has been added. A separate Letter to this effect is attached.

Also attached is a copy of the Deposit receipt and viability statement for Deposit Accession No. DSM 13396, which was received by DSMZ-Deutsche Sammlung Von

**ZANDER**  
Serial No. **Unknown**

Mikroorganismen Und Zellkulturen GmbH, Mascheroder Weg 1b, D-38124 Braunschweig,  
Germany, on March 27, 2000.

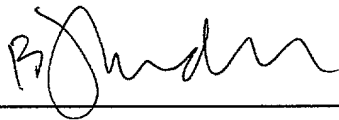
A marked-up copy of the amended claims is also attached.

An early and favorable Action on the merits is requested.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_



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**MARKED-UP COPY OF AMENDED CLAIMS**

3. (Amended) Vector according to Claim 1 [or 2], characterized in that the nucleic acid sequence codes for the surface marker is the sequence indicated in SEQ ID NO: 1, 3 or 5 or for a fragment, a mutant or variant of the same.

4. (Amended) Vector according to [Claims 1 to 3] Claim 1, characterized in that it is a retroviral vector.

5. (Amended) Vector according to [Claims 1 to 4] Claim 1, characterized in that it contains a nucleic acid sequence coding for a further surface marker.

9. (Amended) Host cell, characterized in that it is transduced with a vector according to [Claims 1 to 8] Claim 1.

12. (Amended) Method for the detection of genetically modified cells, characterized in that the cells are transduced with a vector according to [Claims 1 to 5] Claim 1 and the transduced cells are identified by detection of the surface marker.

13. (Amended) Method for the selection of genetically modified cells, characterized in that the cells are transduced with a vector according to [Claims 1 to 5] Claim 1, bound to an agent specific to the surface marker, and separated from the genetically unmodified cells.

16. (Amended) Method according to Claim 14 [or 15], characterized in that the nucleic acid sequence codes for a surface marker according to SEQ ID NO: 2, 4 or 6 or for a fragment or a variant of the same.

17. (Amended) Method according to Claims 14 [or 15], characterized in that the nucleic acid sequence coding for the surface marker is the sequence indicated in SEQ ID NO: 1, 3 or 5 or a fragment, mutant or variant of the same.

18. (Amended) Method according to [Claims 14 to 17] Claim 14, characterized in that the vector is a retroviral vector.

19. (Amended) Method according to [Claims 14 to 18] Claim 14, characterized in that the vector corresponding to DSM 13396 is used.

20. (Amended) Method according to [Claims 12 to 19] Claim 12, characterized in that the cells are human cells.

22. (Amended) Kit [for carrying out a method according to Claim 12, characterized in that it contains] containing a vector according to [Claims 1 to 5,] Claim 1 and means for the specific detection of [the] a surface marker, and further agents and aids required for carrying out [the] a detection.

23. (Amended) Kit [for carrying out a method according to Claim 14, characterized in that it contains] containing a vector [as mentioned in Claims 14 to 19] of Claim 14 and, means for the specific detection of [the] a surface marker and further agents and aids required for carrying out [the] a detection.

26. (Amended) Use of a vector according to [Claims 1 to 5] Claim 1 for *in vitro* transduction of T-lymphocytes.

27. (Amended) Use of a vector according to [Claims 1 to 5] Claim 1 for gene therapeutic treatment.

28. (Amended) Use of T-lymphocytes which are transduced with a vector according to [Claims 1 to 5] Claim 1, for gene therapeutic treatment.

31. (Amended) Gene therapeutic drug, containing a vector according to [Claims 1 to 5] Claim 1.

32. (Amended) Gene therapeutic drug, containing T-lymphocytes, which are transduced with a vector according to [Claims 1 to 5] Claim 1.